

CLAIMS:

1. A composite implant for repairing a tissue defect in a patient, comprising:
a porous tissue scaffold formed from a bioresorbable, synthetic polymeric material and including at least one pocket formed therein adapted to contain a viable tissue.
2. The composite implant of claim 1, further comprising a viable tissue disposed within the at least one pocket in the scaffold and effective to migrate into the scaffold to integrate with native tissue surrounding the scaffold.
3. The composite implant of claim 2, further comprising at least one bioactive substance applied to the viable tissue and effective to stimulate cell growth.
4. The composite implant of claim 3, wherein the bioactive substance is selected from the group consisting of a blood clots, platelet rich plasma, cartilage-derived morphogenic proteins, recombinant human growth factors, and combinations thereof.
5. The composite implant of claim 1, wherein the tissue scaffold includes top and bottom portions.
6. The composite implant of claim 5, wherein the top and bottom portions are at least partially mated to one another.
7. The composite implant of claim 5, wherein the top and bottom portions of the tissue scaffold are heated sealed to one another around a perimeter thereof to form an enclosed pocket therebetween.
8. The composite implant of claim 7, further comprising a viable tissue disposed within the enclosed pocket.

9. The composite implant of claim 1, wherein the tissue scaffold is substantially wedge-shaped and the pocket comprises a hollow interior formed in the tissue scaffold.
10. The composite implant of claim 1, wherein the tissue scaffold is substantially wedge-shaped, and the pocket comprises at least one lumen extending into the tissue scaffold.
11. The composite implant of claim 1, wherein the tissue scaffold includes at least one surface feature formed thereof to promote blood vessel formation.
12. The composite implant of claim 11, wherein the at least one surface feature comprises a plurality of channels formed on an outer surface of the tissue scaffold.
13. A composite implant for repairing a tissue defect in a patient, comprising:
 - a porous tissue scaffold having at least one pocket formed therein; and
 - a viable tissue disposed within the at least one pocket in the scaffold and effective to migrate into the scaffold to integrate with native tissue surrounding the scaffold, the viable tissue containing tissue fragments selected from the group consisting of minced, sliced, and slivered tissue fragments.
14. The composite implant of claim 13, wherein the tissue scaffold is formed from at least one material selected from the group consisting of natural polymers, synthetic polymers, and combinations thereof.
15. The composite implant of claim 13, further comprising at least one bioactive substance applied to the viable tissue and effective to stimulate cell growth.
16. The composite implant of claim 15, wherein the bioactive substance is selected from the group consisting of a blood clots, platelet rich plasma, cartilage-derived morphogenic proteins, recombinant human growth factors, and combinations thereof.

17. The composite implant of claim 13, wherein the tissue scaffold includes top and bottom portions.
18. The composite implant of claim 17, wherein the top and bottom portions are at least partially mated to one another.
19. The composite implant of claim 17, wherein the top and bottom portions of the tissue scaffold are heated sealed to one another around a perimeter thereof to form an enclosed pocket therebetween containing the viable tissue.
20. The composite implant of claim 13, wherein the tissue scaffold is substantially wedge-shaped and the pocket comprises a hollow interior formed in the tissue scaffold.
21. The composite implant of claim 13, wherein the tissue scaffold is substantially wedge-shaped, and the pocket comprises at least one lumen extending into the tissue scaffold.
22. The composite implant of claim 13, wherein the tissue scaffold includes at least one surface feature formed thereof to promote blood vessel formation.
23. The composite implant of claim 22, wherein the at least one surface feature comprises a plurality of channels formed on an outer surface of the tissue scaffold.
24. A method for repairing defective tissue, comprising:
 - providing a tissue scaffold formed from a bioresorbable, synthetic polymeric material having at least one pocket formed therein and adapted to contain a viable tissue;
 - obtaining a viable tissue;
 - loading the viable tissue into the at least one pocket of the tissue scaffold; and
 - implanting the tissue scaffold with the viable tissue disposed therein at a defect site in a patient's body.

25. The method of claim 24, further comprising the step of applying at least one bioactive substance to the viable tissue to stimulate cell growth.
26. The method of claim 25, wherein the bioactive substance is selected from the group consisting of a clot, platelet rich plasma, cartilage-derived morphogenic proteins, recombinant human growth factors, and combinations thereof.
27. The method of claim 24, wherein the tissue scaffold includes top and bottom portions.
28. The method of claim 27, wherein the top and bottom portions are at least partially mated to one another.
29. The method of claim 27, wherein the top and bottom portions of the tissue scaffold are heated sealed to one another around a perimeter thereof to form an enclosed pocket therebetween containing the viable tissue.
30. The method of claim 24, wherein the tissue scaffold is substantially wedge-shaped and the pocket comprises a hollow interior formed in the tissue scaffold.
31. The method of claim 24, wherein the tissue scaffold is substantially wedge-shaped, and the pocket comprises at least one lumen extending into the tissue scaffold.
32. The method of claim 24, wherein the tissue scaffold includes at least one surface feature formed thereof to promote blood vessel formation.
33. The method of claim 32, wherein the at least one surface feature comprises a plurality of channels formed on an outer surface of the tissue scaffold.
34. A method for repairing defective tissue, comprising:
providing a tissue scaffold having at least one pocket formed therein and adapted to

contain a viable tissue;
obtaining a viable tissue;
preparing the viable tissue to form tissue fragments selected from the group consisting of minced, sliced, and slivered tissue fragments;
loading the tissue fragments into the at least one pocket of the tissue scaffold; and
implanting the tissue scaffold with the tissue fragments disposed therein at a defect site in a patient's body.

35. The method of claim 34, wherein the tissue scaffold is formed from at least one material selected from the group consisting of natural polymers, synthetic polymers, and combinations thereof.

36. The method of claim 34, further comprising the step of applying at least one bioactive substance to the tissue fragments to stimulate cell growth.

37. The method of claim 36, wherein the bioactive substance is selected from the group consisting of a blood clots, platelet rich plasma, cartilage-derived morphogenic proteins, recombinant human growth factors, and combinations thereof.

38. The method of claim 34, wherein the tissue scaffold is substantially wedge-shaped and the pocket comprises a hollow interior formed in the tissue scaffold.

39. The method of claim 34, wherein the tissue scaffold is substantially wedge-shaped, and the pocket comprises at least one lumen extending into the tissue scaffold.

40. The method of claim 34, wherein the tissue scaffold includes at least one surface feature formed thereof to promote blood vessel formation.

41. The method of claim 40, wherein the at least one surface feature comprises a plurality of channels formed on an outer surface of the tissue scaffold.